

## REPORT ON MAPLE PRODUCTS\*

By C. O. WILLITS, Eastern Utilization Research and Development Division,  
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The Associate Referee on Microbiological Methods, Mr. John Kissinger, has continued to direct his attention to the yeast contaminants of maple sirup. Last year he reported on a method for determining yeast counts in maple sirup which was tested collaboratively. These tests disclosed the need for better control of growth of microorganisms while the sirup samples are in transit to the collaborators, and the need for obtaining more uniform suspensions of the yeast cells before subsampling, either the samples for collaborative testing or the collaborator's sample for analysis. This year's study resulted in a method that overcame these difficulties. The collaborators' samples were maintained in a frozen state during shipment via air freight, and a uniform dispersion of the cells before sampling was obtained by warming the sample (lowering its viscosity and mixing with a nonaerating stirrer).

The collaborators' reports showed good agreement in the yeast counts they obtained.

The Associate Referee on Methods of Analysis, Dr. Arthur Wendt, was again unable to carry on any revision or development of methods but has assured your General Referee that he will be able to do so next year.

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\*Presented, as the report of the General Referee on Maple Products, at the 81st annual meeting of the Association of Official Analytical Chemists, Washington, D. C., October 9-12, 1967.

The Associate Referee on the Flavor of Maple Products, Dr. J. C. Underwood, has continued work on the isolation and identification of maple flavor as well as work on impurities in cane sugar which could be used to identify cane sugar when used as an adulterant in pure maple sirup and/or sap. This work has not yet provided sufficient information to develop a method for the detection of adulteration.

#### Recommendations

It is recommended that:

1. The method for sampling and counting yeast cells in maple submitted by the Associate Referee on Microchemical Methods be adopted official, first action.
2. Work on analytical methods for maple sirup be continued.
3. Work on method for determining the flavor constituents of maple sirup be continued.

## Report on Maple Products

By C.O. Willis, Eastern Utilization Research and Development Division  
U.S. Department of Agriculture, 600 E. Mermaid Lane, Phila, Pa 19118

The Associate Referee on Microbiological Methods,

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either the samples for collaborative testing  
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good agreement in their ~~obtained~~  
yeast counts they obtained.

The Associate Referee on Methods of Analysis, Dr Arthur Wendt, was again unable to ~~do~~ carry on any revision or development of methods but has assured your General Referee that he will be able to do so next year.

The Associate Referee on the Flavor of Maple Products, Dr J.C.

Underwood, has continued work on the isolation and identification of maple flavor as well as work on impurities in cane sugar which could be used

to identify ~~the~~ cane sugar when used as an adulterant in pure maple syrup and/or syrup. This work has not yet provided sufficient information to develop a method for the detection of adulteration.

### Recommendations

It is recommended

1. That the method <sup>(for sampling and counting yeast cells in maple)</sup> submitted by the

Associated referee on micro chemical method

be adopted Official First Action  
~~that~~

2. Work on analytical methods for maple syrup be continued

3. <sup>that</sup> Work on method for determining the ~~flavor~~ constituents of maple syrup be continued.